Application No. 10/630,738
Amdt. Dated December 16, 2005
Reply to Office Action dated September 20, 2005

Docket No. 8733.444.10-US

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated September 20, 2005 has been received and its contents carefully reviewed.

Claims 1, 2 and 33 are currently pending in this application. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, claims 1, 2 and 33 are rejected under 35 U.S.C. § 102(a) as being anticipated by Japanese Publication No. 11-140168 to Yamamoto (hereinafter "Yamamoto") regarding component A species. Claims 1, 2 and 33 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,682,783 to Tomioka et al. (hereinafter "Tomioka") regarding component A species. Claims 1, 2 and 33 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,486,560 to Shiga et al. (hereinafter "Shiga") regarding component A species. Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,270,938 to Gandini et al. (hereinafter "Gandini") regarding component A species.

The rejections of claims 1, 2 and 33 are respectfully traversed. As set forth in MPEP §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. That is, the identical invention must be shown in as complete detail as is contained in the claim.
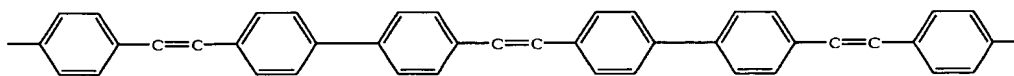
The rejection of claims 1, 2 and 33 as being anticipated by Yamamoto is respectfully traversed and reconsideration is requested.

The Examiner asserts that the polymer shown in formula (IX) on page 7 of Yamamoto, shown below:
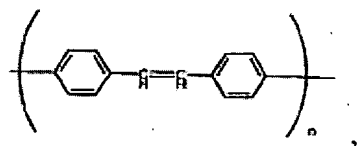

is the same one drawn out by Applicant in the Remarks dated July 6, 2005.

Part of the polymer drawn out by Applicant is shown below:

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Applicant respectfully disagrees with the Examiner's assertion that the compounds are the same. Specifically, Yamamoto discloses a polymer with the formula:
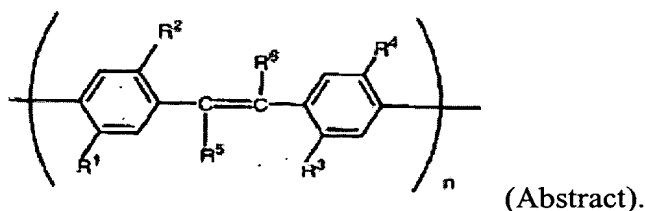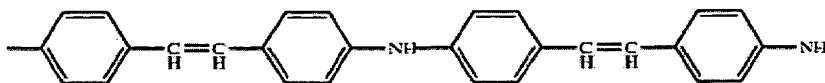
 (Abstract).

Yamamoto teaches that R1 to R4 are each H or a substituent such as phenyl and R5 and R6 are each H, alkyl, or optionally substituted phenyl, <u>provided all of R1 to R6 are not simultaneously H</u>. See Abstract. Therefore, Yamamoto does not disclose an identical polymer and teaches away from the polymer as claimed in present claims 1 and 33. Furthermore, there is no teaching or suggestion in Yamamoto that the polymer shown in formula (IX) is functional. That is, the disclosure of Yamamoto is not enabling for a compound where R1 to R6 are simultaneously H, as Yamamoto specifically teaches away from a compound where R1 to R6 are simultaneously H. Accordingly, because Yamamoto fails to teach the elements of claims 1 and 33, Applicant respectfully submits that claims 1 and 2, which depends therefrom, and claim 33 are allowable over Yamamoto.

The rejection of claims 1, 2 and 33 as being anticipated by Tomioka is respectfully traversed and reconsideration is requested.
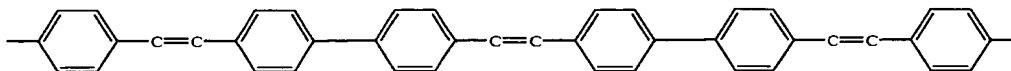
The Examiner asserts that Tomioka teaches "a photoalignment material (column 9, lines 45-50) comprising Chemical Formula 3" below:
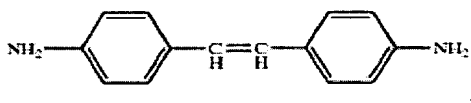
and that this corresponds to the polymer recited in present claims 1 and 33. However, Applicant respectfully disagrees. When Chemical Formula 3 of Tomioka is drawn out, it corresponds to the following formula:

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Part of the polymer drawn out by Applicant is shown below:

As is evident from the comparison shown above, Chemical Formula 3 of Tomioka is not identical to the monomer recited in claims 1 and 33. Therefore, Applicant respectfully submits that Tomioka fails to anticipate claims 1 and 33.
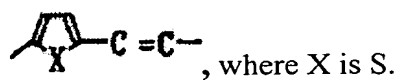
Furthermore, the Examiner asserts that "the –NHCO- in the polyamic acid …corresponds to the B component of Applicant." However, Tomioka merely discloses that the polyamic acid is used in preparation of the liquid crystal composition. See column 18, lines 35-55. Also, Chemical Formula 3 does not contain any "-NHCO-" group. Accordingly, because Tomioka fails to teach the elements of claims 1 and 33, Applicant respectfully submits that claims 1 and 2, which depends therefrom, and claim 33 are allowable over Tomioka.

The rejection of claims 1, 2 and 33 as being anticipated by Shiga is respectfully traversed and reconsideration is requested.

The Examiner asserts that Shiga teaches component A species
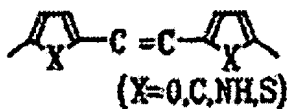
of present claims 1 and 33 as Shiga teaches poly(3-alkylthienylenevinylene). See column 2, line 52. However, Applicant respectfully disagrees with the Examiner's assertion. The repeat unit of poly(3-alkylthienylenevinylene) is
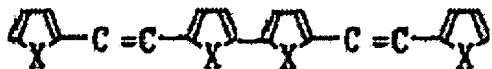
 , where X is S.

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When the repeat unit of poly(3-alkylthienylenevinylene) is drawn out, it corresponds to the following formula:

, where X is S.

The species of claim 1 drawn out is shown below:

.

As is evident from the comparison shown above, the monomer disclosed in Shiga is not identical to the monomer recited in claims 1 and 33. Accordingly, because Shiga fails to teach the elements of claims 1 and 33, Applicant respectfully submits that claims 1 and 2, which depends therefrom, and claim 33 are allowable over Shiga.

The rejection of claim 1 as being anticipated by Gandini is respectfully traversed and reconsideration is requested.

The Examiner asserts that Gandini teaches component A species

(X=O,C,NH,S)

of present claims 1 and 33 as Gandini teaches furylvinylidene, thienylvinylidene and pyrrolylvinylidene. See Abstract. However, the repeat unit of these polymers is

, where X is S, O, or N.

When the repeat unit for each of these polymers is drawn out, it corresponds to the following formula:

, where X is S, O or N.

The species of claim 1 drawn out is shown below:

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As is evident from the comparison shown above, the monomers disclosed in Gandini are not identical to the monomer recited in claims 1 and 33. Accordingly, because Gandini fails to teach the elements of claims 1 and 33, Applicant respectfully submits that claims 1 and 2, which depends therefrom, and claim 33 are allowable over Gandini.

Applicant believes the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Dated: <u>December 16, 2005</u>   Respectfully submitted,

By _____
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